

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004332**Date Inspected:** 29-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Zhi Neng Zhang, Sun Yan Fei			CWI Present:	Yes	No	
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A

Bridge No: 34-0006**Component:** tower skin assemblies and deck plates & panels**Summary of Items Observed:**

Hot Topics: Caltrans Quality Assurance Inspector George Goulet (QA Inspector) was informed by Caltrans Structural Material Representative Josh Ishibashi (SMR) that SMR was issuing an Incident Report concerning ZPMC welders performing doubler plate to SSD1-A skin plate welds using FCAW-G on material with a thickness of 90mm. WPS B-T-4332-TC-P4-F, being used, only allows for this weld to be performed on material only up to 75mm. At approximately 1000 hours, ABF QC Jeff Chan told QA Inspector that he had emailed information on this issue to ABF Managers Don Walton and Mike Williams but had not received any feedback. Today, QA Inspector again observed ZPMC welders performing FCAW-G on material with a thickness of 90mm.

Tower shop - Bay 1

QA Inspector randomly observed approximately 90 ZPMC workers performing the following: SMAW of a butt weld root, cutting beveled edges, air-arc back gouging, and grinding of butt weld cover pass on skin and stiffener plates; FCAW-G of doubler plates to fill pass on SSD1 – skin A assembly (see the note under Hot Topics; grinding of 700mm x 150mm half-round holes in stiffeners on SSD1-E skin assembly; electric preheating of skin plate in preparation for SAW butt welds. Also present in this bay were ZPMC CWI's Zhi Neng Zhang and Zhang Huang as well as ABF QC's Li Nan, Jeff Chan, and Kim Xiao. Items observed appeared to comply with project specifications, with the exception of the above noted Hot Topic.

Tower shop - Bay 2

QA Inspector randomly observed approximately 80 ZPMC workers performing the following: flame cutting of beveled edges and SAW butt welds of skin plates; flame heat straightening of ESD1-C skin assembly; fit-up of ESD1-E skin assembly to ESD1-A skin assembly with 10 diaphragms also in place; flame preheating and SMAW

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

of indications on stiffeners on ESD1-skin D assembly; flame preheating of upper connection plates on multiple stiffeners on ESD1-B assembly. Also present in this bay was ABF QC Xing Xiao Guang. Items observed appeared to comply with project specifications.

Heavy Duty Machine Shop - Bay 3

QA Inspector randomly observed 11 ZPMC workers performing the following: grinding of U-rib to deck panel welds on DP599-001, DP551-001, and DP164-001. There were 15 full size panels and several unidentified deck plates in various stages of butt welding present in the bay. Also present in this bay were ZPMC CWI's Sun Yan Fei and Li Yan Hua as well as ABF QC Wang Zhong Yuan. Items observed appeared to comply with project specification.

Summary of Conversations:

As noted above in Summary.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, 136-6471-0411, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet, George	Quality Assurance Inspector
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Reviewed By:	Carreon, Albert	QA Reviewer
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